

ELECTRONICS TECHNICIAN

INFORMATION SHEET

Hand Tools

Objective: How to select the proper tools of the trade with respect to to type and quality.

I. Basic Requirements: This is a list of the "must tools" and all students after not more than eight weeks are expected to have.

A. Tool Box

Steel--around 16" in length with tray. Do not acquire too large a one, it will be heavy to carry around.

Cost: not less than \$4.00

B. Long Nose Pliers

Long tapered jaws and needle nose are the best type since they will reach the work easily. Good quality is all important for inferior or cheap types have jaws that will soon twist. When making your purchase hold the plier up to a light and make sure there is good contact at the very tip. Examine several and select the best one.

Cost: not less than \$2.00.

C. Diagonal Cutting Pliers

Generally one with a long handle to reach the work and a small head to go between components is the best type. Good quality is again important because sharp cutters are required to make a clean cut of both the conductor and its insulation. Most of the work done by the cutter is at the very tip, be sure and select one whose cutting edges meet at the tip.

Cost: not less than \$2.00.

D. Drivers

Phillips: medium and large size.

Screw drivers: thin blade for set screws and adjustments, medium size, and one heavy duty.

Nut drivers: sizes 3/16 to 9/16.

In all drivers good steel is important, a poor grade will soon twist or wear out of shape. Some manufactures supply all the drivers in a kit form having one handle do for all the blades.

Cost: appx. \$6.00.

E. Soldering Iron

Either a standard or gun type around 100 watts. If you prefer the standard iron be sure and include a stand for it.

Cost: not less than \$4.50.

F. Flashlight

Pen type which can be carried or will not take up too much room in the tool box. Even in the best overhead lighting it is impossible at times to see clearly underneath a chassis.

Cost: appx. \$1.00

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Information Sheet--Hand Tools (cont.)

G. Combination Pliers

For those jobs where nothing else fits.

Cost: appx. \$1.00.

H. Test Leads

All purpose with interchangeable tips from phono to banana, spade lugs, and alligator clips.

Cost: appx. \$1.50.

TOTAL COST OF BASIC TOOLS: APPX. \$25.00

II. Secondary Requirements: These are the tools that the student must have in the second semester of this course. Cost of the items are not listed as in the first group where it was important as a guide to quality. At this stage you should be familiar with grade or quality.

A. Alignment Tools

Several of the manufactures make alignment kits at a reasonable price.

B. Adjustable Wrench

6 inch average.

C. Drills

Set up to 1/4 inch.

D. Screwdriver

Stubby for jobs where the long handle will not fit.

H. 20,000 ohm per volt or VTVM multimeter.

I. 20 to 30 watt soldering iron for delicate jobs.

